

Pred. No.:	2,878-159	Length:	1633
Score:	1385.00	Matches:	257
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	4	Gaps:	0

3-dimensional structures of BK beta 2, BK beta 3 or BK beta 4 are used to identify ligands that bind to the beta subunit. The characterized BK beta subunits are used to determine how Slo potassium channels function in different environments and how they respond to different activation mechanisms. The polynucleotides are used to transfect cells in vivo and in vitro to mitigate effects of absent, partial inactivation or abnormal expression of the BK beta subunit gene e.g. to correct genetic defects, cancer and viral infection

Sequence 257 AA;

Query Match 100.0%; Score 1385; DB 3; Length 257;
Best Local Similarity 100.0%; Pred. No. 9,3e-140;
Matches 257; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 MTAFPASGKKRETDYSDGDLVDYHKLPSSTGSDRAVLMGFAMMGPSVLMFLLGTTILK 60
1 MTAFPASGKKRETDYSDGDLVDYHKLPSSTGSDRAVLMGFAMMGPSVLMFLLGTTILK 60
61 PFMLSIOREESTCTAHTDMDMDLCAFTCGVHCHGQGXPCLOVFNLSHPGQKALLH 120
61 PFMLSIOREESTCTAHTDMDMDLCAFTCGVHCHGQGXPCLOVFNLSHPGQKALLH 120
121 YNEBAVOINPKCFYTPKCHODRDLNSALDIKEFPDHKNGTPSCFSPASQSEDIYLI 180
121 YNEBAVOINPKCFYTPKCHODRDLNSALDIKEFPDHKNGTPSCFSPASQSEDIYLI 180
181 KKYDQVAIFHCLFMPSTLLGALIVGMVRLTQHSLLCEKYSTVVRDEVGKVPYIEQH 240
181 KKYDQVAIFHCLFMPSTLLGALIVGMVRLTQHSLLCEKYSTVVRDEVGKVPYIEQH 240
241 QFKLCIMRSKGRAEKS 257
241 QFKLCIMRSKGRAEKS 257

RESULT 2

AAB35303 standard; protein; 257 AA.

AAB35303;

08-MAY-2001 (first entry)

Human calcium sensitive potassium channel beta3b subunit.

Human; calcium sensitive potassium channel; beta2 subunit; asthma;
beta3a subunit; beta3b subunit; beta3c subunit; diabetes;
chromosome 3q23-ter; inhibitor; activator; glaucoma; migraine; angina;
irritable bowel syndrome; Alzheimer's disease.

Homo sapiens.

WO200105628-A1.

25-JAN-2001.

18-JUL-2000; 2000WO-US019585.

20-JUL-1999; 99US-0144764P.

(MERI) MERCK & CO INC.

Uebele V, Swanson R, Liu Y, Lagrutta A;

WPI; 2001-159514/16.

N-PDB; AAF27993.

Novel human calcium sensitive potassium channel subunits for identifying inhibitors and agonists of the potassium channel for use in treating conditions such as asthma, hypertension, memory disorders, depression.

Claim 9; Fig 3B; 89pp; English.

The present invention provides the protein and coding sequences of the human calcium sensitive potassium channel beta2, beta3a, beta3b, beta3c and beta3d subunits. These can be used to identify inhibitors and activators of the channels, which can be used in the treatment of conditions including asthma, diabetes, glaucoma, cerebral ischaemia, Alzheimer's disease, excessive smooth muscle tone, angina, hypertension, incontinence, migraine and irritable bowel syndrome. The coding sequences are found at human chromosome 3q23-ter. The present sequence is the beta3b subunit

Sequence 257 AA;

Query Match 100.0%; Score 1385; DB 4; Length 257;
Best Local Similarity 100.0%; Pred. No. 9,3e-140;
Matches 257; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 MTAFPASGKKRETDYSDGDLVDYHKLPSSTGSDRAVLMGFAMMGPSVLMFLLGTTILK 60
1 MTAFPASGKKRETDYSDGDLVDYHKLPSSTGSDRAVLMGFAMMGPSVLMFLLGTTILK 60
61 PFMLSIOREESTCTAHTDMDMDLCAFTCGVHCHGQGXPCLOVFNLSHPGQKALLH 120
61 PFMLSIOREESTCTAHTDMDMDLCAFTCGVHCHGQGXPCLOVFNLSHPGQKALLH 120
121 YNEBAVOINPKCFYTPKCHODRDLNSALDIKEFPDHKNGTPSCFSPASQSEDIYLI 180
121 YNEBAVOINPKCFYTPKCHODRDLNSALDIKEFPDHKNGTPSCFSPASQSEDIYLI 180
181 KKYDQVAIFHCLFMPSTLLGALIVGMVRLTQHSLLCEKYSTVVRDEVGKVPYIEQH 240
181 KKYDQVAIFHCLFMPSTLLGALIVGMVRLTQHSLLCEKYSTVVRDEVGKVPYIEQH 240
241 QFKLCIMRSKGRAEKS 257
241 QFKLCIMRSKGRAEKS 257

RESULT 3

AAW78995 standard; protein; 277 AA.

AAW78995;

06-NOV-2001 (first entry)

Human protein SEQ ID NO 1657.

Human; cytokine; cell proliferation; cell differentiation; gene therapy;
vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
tissue growth factor; immunomodulatory; cancer; leukaemia;
nervous system disorder; arthritis; inflammation.

Homo sapiens.

WO200157190-A2.

09-AUG-2001.

05-FEB-2001; 2001WO-US004088.

03-FEB-2000; 2000US-00496914.

27-APR-2000; 2000US-00560875.

20-JUN-2000; 2000US-00598075.

19-JUL-2000; 2000US-00620325.

01-SEP-2000; 2000US-00649361.

15-SEP-2000; 2000US-00663561.

20-OCT-2000; 2000US-00693325.

30-NOV-2000; 2000US-00728422.

(HYSE-) HYSEQ INC.

Tang YT, Liu C, Dermanac RT, Auendi V, Zhou P, Xu C, Cao Y;